

Table: Queries

Column Name	Type
query_name	varchar
result	varchar
position	int
rating	int

There is no primary key for this table, it may have duplicate rows.

This table contains information collected from some queries on a database.

The position column has a value from 1 to 500.

The rating column has a value from 1 to 5. Query with rating less than 3 is a poor query.

We define query quality as:

The average of the ratio between query rating and its position.

We also define poor query percentage as:

The percentage of all queries with rating less than 3.

Write an SQL query to find each query\_name, the quality and poor\_query\_percentage.

Both quality and poor\_query\_percentage should be **rounded to 2 decimal places**.

Return the result table in **any order**.

The query result format is in the following example.

Example 1:\*\*

Input:

Queries table:

query_name	result	position	rating
Dog	Golden Retriever	1	5
Dog	German Shepherd	2	5
Dog	Mule	200	1
Cat	Shirazi	5	2
Cat	Siamese	3	3
Cat	Sphynx	7	4

Output:

query_name	quality	poor_query_percentage
Dog	2.50	33.33
Cat	0.66	33.33

Explanation:

Dog queries quality is  $((5 / 1) + (5 / 2) + (1 / 200)) / 3 = 2.50$

Dog queries poor\_ query\_percentage is  $(1 / 3) * 100 = 33.33$

Cat queries quality equals  $((2 / 5) + (3 / 3) + (4 / 7)) / 3 = 0.66$

Cat queries poor\_ query\_percentage is  $(1 / 3) * 100 = 33.33$